

Copper Foundries (Except Die-Casting): 2002

Issued August 2004

EC02-311-331525

2002 Economic Census

Manufacturing

Industry Series



USCENSUSBUREAU

Helping You Make Informed Decisions

U.S. Department of Commerce
Economics and Statistics Administration
U.S. CENSUS BUREAU



Table 1. Historical Statistics for the Industry: 2002 and Earlier Years

[Data based on the 2002 Economic Census and the 2002 Annual Survey of Manufactures (ASM). For information on confidentiality protection, sampling error, nonsampling error, and explanation of terms, see note at end of table. For meaning of abbreviations and symbols, see introductory text]

Industry and year ¹	Com- panies ²	All estab- lish- ments ³	All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)
			Number ⁴	Payroll (\$1,000)	Number ⁴	Hours (1,000)	Wages (\$1,000)				
331525, Copper foundries (except die- casting)	2002..	282	7 131	218 508	5 887	11 716	155 641	477 993	265 702	744 864	32 945
	2001..	N	8 178	239 019	6 708	13 806	167 080	566 058	349 649	915 331	22 970
	2000..	N	9 138	267 287	7 551	15 696	189 065	579 788	388 102	965 273	23 460
	1999..	N	9 341	269 530	7 658	15 432	194 572	555 481	370 685	920 057	24 645
	1998..	N	9 353	271 763	7 854	15 765	199 780	524 971	346 183	864 496	12 148
	1997..	301	8 868	258 151	7 388	14 997	191 431	511 783	339 705	846 578	24 949

¹Statistics presented for years ending in 2 and 7 are census data. Interim census years are derived in a representative sample of manufacturing establishments canvassed in the Annual Survey of Manufactures (ASM).

²For the census, a company is defined as a business organization consisting of one establishment or more under common ownership or control.

³Includes establishments with payroll at any time during the year.

⁴Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

Note: The data in this table are based on the 2002 Economic Census and the 2002 Annual Survey of Manufactures (ASM). To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain sampling errors and nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

Table 2. Industry Statistics for Selected States: 2002

[States that are a disclosure or with less than 100 employees are not shown. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, explanation of terms, and geographical definitions, see note at end of table. For information on geographic areas followed by *, see Appendix D. For meaning of abbreviations and symbols, see introductory text]

Industry and geographic area	E ¹	All establishments ²		All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
		Total	With 20 employees or more	Number ³	Payroll (\$1,000)	Number ³	Hours (1,000)	Wages (\$1,000)				
331525, Copper foundries (except die-casting)												
United States	2	282	107	7 131	218 508	5 887	11 716	155 641	477 993	265 702	744 864	32 945
Alabama	—	4	3	159	4 937	123	277	2 507	11 505	3 609	15 355	228
California	2	28	9	586	16 654	494	973	11 658	40 044	19 627	59 548	2 193
Illinois	1	18	9	593	20 166	492	976	14 671	43 082	22 096	64 573	1 940
Indiana	—	9	6	245	5 934	216	443	4 665	11 063	9 864	21 362	550
Michigan	—	5	3	248	9 688	179	329	5 456	23 620	11 688	35 823	1 291
New Jersey	3	6	2	128	4 509	107	224	3 269	9 528	3 988	13 673	865
New York	8	10	4	201	5 382	167	325	3 720	11 359	5 184	16 540	933
Ohio	2	20	10	491	16 436	410	799	11 799	32 658	24 865	59 749	3 174
Oklahoma	8	4	1	101	2 506	83	162	1 767	6 400	3 434	9 835	530
Oregon	7	14	2	146	4 191	127	221	3 188	12 918	4 481	17 399	1 044
Pennsylvania	1	23	12	906	28 977	704	1 465	20 229	56 716	30 681	86 978	4 726
Texas	3	16	6	215	6 655	172	362	4 674	15 615	7 955	23 809	760
Utah	4	8	2	122	2 479	104	161	1 816	4 911	1 562	6 503	186
Wisconsin	—	15	8	762	25 478	657	1 284	19 044	63 439	37 779	101 216	3 397

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

²Includes establishments with payroll at any time during the year.

³Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C. For geographical definitions, see Appendix D.

Table 3. Detailed Statistics by Industry: 2002

[Data based on the 2002 Economic Census and the 2002 Annual Survey of Manufactures (ASM). For information on confidentiality protection, sampling error, nonsampling error, and explanation of terms, see note 2 at end of table. For meaning of abbreviations and symbols, see introductory text]

Item	Value
331525, Copper foundries (except die-casting)	
Companies ¹	number.. 281
All establishments ²	number.. 282
Establishments with 1 to 19 employees	number.. 175
Establishments with 20 to 99 employees	number.. 93
Establishments with 100 employees or more	number.. 14
All employees ³	number.. 7 131
Total compensation	\$1,000.. 275 573
Annual payroll	\$1,000.. 218 508
Total fringe benefits	\$1,000.. 57 065
Production workers, average for year	number.. 5 887
Production workers on March 12	number.. 5 912
Production workers on May 12	number.. 5 943
Production workers on August 12	number.. 5 950
Production workers on November 12	number.. 5 740
Production worker hours	1,000.. 11 716
Production worker wages	\$1,000.. 155 641
Total cost of materials	\$1,000.. 285 702
Materials, parts, containers, packaging, etc., used	\$1,000.. 206 269
Resales	\$1,000.. 8 435
Purchased fuels	\$1,000.. 8 439
Purchased electricity	\$1,000.. 20 355
Contract work	\$1,000.. 22 204
Quantity of electricity purchased for heat and power	1,000 kWh.. 301 311
Quantity of electricity generated less sold for heat and power	1,000 kWh.. -
Total value of shipments	\$1,000.. 744 864
Primary products value of shipments	\$1,000.. 653 120
Secondary products value of shipments	\$1,000.. 75 624
Total miscellaneous receipts	\$1,000.. 16 120
Value of resales	\$1,000.. 12 540
Contract receipts	\$1,000.. D
Other miscellaneous receipts	\$1,000.. D
Primary products specialization ratio	percent.. 90
Value of primary products shipments made in all industries	\$1,000.. 757 390
Value of primary products shipments made in this industry	\$1,000.. 653 120
Value of primary products shipments made in other industries	\$1,000.. 104 270
Coverage ratio	percent.. 86
Value added	\$1,000.. 477 993
Total inventories, beginning of year	\$1,000.. 85 774
Finished goods inventories	\$1,000.. 33 205
Work-in-process inventories	\$1,000.. 24 764
Materials and supplies inventories	\$1,000.. 27 805
Total inventories, end of year	\$1,000.. 85 227
Finished goods inventories	\$1,000.. 32 539
Work-in-process inventories	\$1,000.. 24 261
Materials and supplies inventories	\$1,000.. 28 427
Gross value of depreciable assets (acquisition costs) at beginning of year	\$1,000.. 403 189
Total capital expenditures (new and used)	\$1,000.. 32 945
Buildings and other structures (new and used)	\$1,000.. 4 832
Machinery and equipment (new and used)	\$1,000.. 28 113
Automobiles, trucks, etc., for highway use	\$1,000.. 1 978
Computers and peripheral data processing equipment	\$1,000.. 2 395
All other expenditures for machinery and equipment	\$1,000.. 23 740
Total retirements	\$1,000.. 17 835
Gross value of depreciable assets at end of year	\$1,000.. 418 299
Depreciation charges during year	\$1,000.. 26 302
Total rental payments	\$1,000.. 10 999
Buildings and other structures	\$1,000.. 6 923
Machinery and equipment	\$1,000.. 4 076
Total other expenses ⁴	\$1,000.. 38 782
Response coverage ratio ⁵	percent.. 67
Repair and maintenance services of buildings and/or machinery ⁴	\$1,000.. 7 806
Communications services ⁴	\$1,000.. 1 813
Legal services ⁴	\$1,000.. 1 194
Accounting, auditing, and bookkeeping services ⁴	\$1,000.. 2 061
Advertising and promotional services ⁴	\$1,000.. 1 824
Expensed computer hardware and supplies and purchased computer services ⁴	\$1,000.. 1 419
Refuse removal (including hazardous waste) services ⁴	\$1,000.. 1 201
Management consulting and administrative services ⁴	\$1,000.. 1 003
Taxes and license fees ⁴	\$1,000.. 3 478
All other expenses ⁴	\$1,000.. 16 982

¹For the census, a company is defined as a business organization consisting of one establishment or more under common ownership or control.

²Includes establishments with payroll at any time during the year.

³Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

⁴Based on Annual Survey of Manufactures (ASM) sample data.

⁵A response coverage ratio is derived for this item by calculating the ratio of the weighted employment (establishment data multiplied by sample weight) for those Annual Survey of Manufactures (ASM) establishments that reported to the weighted total employment for all ASM establishments classified in this industry.

Note 1: The amounts shown for other expenses reflect only those services that establishments purchase from other companies.

Note 2: The data in this table are based on the 2002 Economic Census and the 2002 Annual Survey of Manufactures (ASM). To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain sampling errors and nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

Table 4. Industry Statistics by Employment Size: 2002

[Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note at end of table. For meaning of abbreviations and symbols, see introductory text]

Employment size class	E ¹	All establishments ²	All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Number ³	Payroll (\$1,000)	Number ³	Hours (1,000)	Wages (\$1,000)				
331525, Copper foundries (except die-casting)											
All establishments	2	282	7 131	218 508	5 887	11 716	155 641	477 993	265 702	744 864	32 945
Establishments with—											
1 to 4 employees	9	80	167	5 128	139	258	3 574	10 900	5 736	17 260	856
5 to 9 employees	5	38	263	8 877	213	423	6 483	18 382	7 870	25 920	1 291
10 to 19 employees	3	57	803	25 874	644	1 288	17 509	54 494	31 951	86 311	6 398
20 to 49 employees	2	60	1 801	54 427	1 505	3 040	39 169	121 879	64 317	186 108	6 654
50 to 99 employees	1	33	2 214	66 034	1 828	3 680	45 915	152 418	73 030	225 830	6 815
100 to 249 employees	—	14	1 883	58 168	1 558	3 027	42 991	119 920	82 798	203 435	10 931
250 to 499 employees	—	—	—	—	—	—	—	—	—	—	—
500 to 999 employees	—	—	—	—	—	—	—	—	—	—	—
1,000 to 2,499 employees	—	—	—	—	—	—	—	—	—	—	—
2,500 employees or more	—	—	—	—	—	—	—	—	—	—	—
Administrative records ⁴	9	95	320	10 095	270	526	7 173	21 416	9 872	31 288	1 899

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data account for 10 percent or more of the figures shown: 1—10 to 19 percent; 2—20 to 29 percent; 3—30 to 39 percent; 4—40 to 49 percent; 5—50 to 59 percent; 6—60 to 69 percent; 7—70 to 79 percent; 8—80 to 89 percent; 9—90 percent or more.

²Includes establishments with payroll at any time during the year.

³Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

⁴Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. Data are also included in respective size classes shown.

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

Table 5. Industry Statistics by Primary Product Class Specialization: 2002

[Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note at end of table. For meaning of abbreviations and symbols, see introductory text]

Industry or product class code	Industry or primary product class	All establishments ¹	All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Number ²	Payroll (\$1,000)	Number ²	Hours (1,000)	Wages (\$1,000)				
331525	Copper foundries (except die-casting) .	282	7 131	218 508	5 887	11 716	155 641	477 993	265 702	744 864	32 945
3315250	Copper foundries	282	7 131	218 508	5 887	11 716	155 641	477 993	265 702	744 864	32 945

¹Includes establishments with payroll at any time during the year.

²Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

Table 6a. Products Statistics: 2002 and 1997

[Includes quantity and value of products of this industry produced by (1) establishments classified in this industry (primary) and (2) establishments classified in other industries (secondary). Transfers of products of this industry from one establishment of a company to another establishment of the same company (interplant transfers) are also included. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note 2 at end of table. For meaning of abbreviations and symbols, see introductory text]

Product code	Product	Number of companies with shipments of \$100,000 or more	Quantity of production for all purposes	Product shipments	
				Quantity	Value (\$1,000)
331525	Copper foundries (except die-casting)	2002.. N 1997.. N	X X	X X	757 390 866 731
3315250	Copper foundries	2002.. N 1997.. N	X X	X X	757 390 866 731
33152506	Copper-base alloy bearings and bushings, nonmachined	2002.. N 1997.. N	X X	X X	14 720 32 840
3315250651	Copper-base alloy bearings and bushings, nonmachined	2002.. 4 1997.. 5	X X	X X	14 720 32 840
33152501	Copper-base alloy sand castings (except bearings and bushings)	2002.. N 1997.. N	X X	X X	182 663 164 612
3315250101	Copper-base alloy sand castings (except bearings and bushings)	2002.. 44 1997.. 58	X X	X X	182 663 164 612
33152502	Leaded red and semi-red brass sand castings (except bearings and bushings)	2002.. N 1997.. N	X X	X X	168 955 194 330
3315250206	Leaded red and semi-red brass sand castings (except bearings and bushings)	2002.. N 1997.. 87	X X	X X	68 797 88 245
3315250221	Engineered copper alloy sand castings, including manganese bronzes, silicon bronzes and brasses, aluminum bronzes, and copper nickels (except bearings and bushings)	2002.. 71 1997.. 89	X X	X X	100 158 106 085
33152504	Tin bronze, copper and high-copper alloy, and other copper alloy sand castings	2002.. N 1997.. N	X X	X X	139 331 219 069
3315250411	Tin bronze sand castings, including leaded and high-leaded (except bearings and bushings)	2002.. 26 1997.. 55	X X	X X	28 578 56 133
3315250416	Copper and high-copper alloy sand castings (except bearings and bushings)	2002.. 25 1997.. 28	X X	X X	43 258 85 244
3315250426	Other copper alloy sand castings, including yellow and leaded yellow brasses, nickel tin bronzes, nickel silvers, lead bronzes, and special alloys (except bearings and bushings) ¹	2002.. 27 1997.. 33	X X	X X	67 495 77 692
33152505	Other copper and copper-base alloy castings, excluding die-castings	2002.. N 1997.. N	X X	X X	148 302 163 879
3315250531	Copper and copper-base alloy permanent and semipermanent mold castings (except bearings and bushings) ¹	2002.. 12 1997.. 5	X X	X X	27 907 25 962
3315250536	Copper and copper-base alloy centrifugal castings (except bearings and bushings) ¹	2002.. 13 1997.. 8	X X	X X	58 916 49 963
3315250541	Copper and copper-base alloy investment castings (except bearings and bushings)	2002.. 25 1997.. 35	X X	X X	29 183 32 557
3315250546	Other copper and copper-base alloy castings, excluding die-castings (except bearings and bushings) ¹	2002.. 10 1997.. 15	X X	X X	32 296 55 397
3315250Y	Copper foundries, nsk, total	2002.. N 1997.. N	X X	X X	103 419 92 001
3315250YWW	Copper foundries, nsk, for nonadministrative-record establishments	2002.. N 1997.. N	X X	X X	74 012 69 573
3315250YWY	Copper foundries, nsk, for administrative-record establishments	2002.. N 1997.. N	X X	X X	29 407 22 428

¹For additional detail, see Current Industrial Report MA331E, Nonferrous Castings.

Note 1: For some establishments, data have been estimated from central unit values that are based on quantity-value relationships of reported data. The following symbols are used when percentage of each quantity figure estimated in this manner equals or exceeds 10 percent of published figure: p-10 to 19 percent estimated; q-20 to 29 percent estimated. If 30 percent or more is estimated, figure is replaced by S.

Note 2: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

Table 6b. **Product Class Shipments for Selected States: 2002 and 1997**

[Not applicable for this report.]

Table 7. Materials Consumed by Kind: 2002 and 1997

[Includes quantity and cost of materials consumed or put into production by establishments classified only in this industry. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note 2 at end of table. For meaning of abbreviations and symbols, see introductory text]

Material code	Material consumed	Quantity	Delivered cost (\$1,000)
331525	Copper foundries (except die-casting)		
00900001	Total materials .....2002..	X	206 269
	.....1997..	X	273 912
33142111	Copper and copper-base alloy shapes and forms (excluding castings, forgings, and fabricated metal products) .....2002..	X	97 681
	.....1997..	X	109 461
33100038	Aluminum and aluminum-base alloy shapes and forms (excluding castings, forgings, and fabricated metal products) .....2002..	X	6 550
	.....1997..	X	N
33149104	Zinc and zinc-base alloy shapes and forms (excluding castings, forgings, and fabricated metal products) .....2002..	X	430
	.....1997..	X	N
33141934	Magnesium and magnesium-base alloy shapes and forms (excluding castings, forgings, and fabricated metal products) .....2002..	X	1 094
	.....1997..	X	N
331000AG	All other nonferrous metal shapes and forms (excluding copper, aluminum, zinc, and magnesium-base alloy castings, forgings, and fabricated metal products) .....2002..	X	811
	.....1997..	X	561
00190034	Copper and copper-base alloy scrap (excluding home scrap) .....2002..	X	12 110
	.....1997..	X	N
00190014	Aluminum and aluminum-base alloy scrap (excluding home scrap) .....2002..	X	823
	.....1997..	X	N
00190079	Other nonferrous metal scrap (excluding home scrap) .....2002..	X	1 266
	.....1997..	X	N
33299700	Industrial patterns .....2002..	X	1 831
	.....1997..	X	2 882
33350003	Industrial dies, molds, jigs, and fixtures .....2002..	X	1 264
	.....1997..	X	757
001900A4	All other industrial and commercial machinery and computer equipment .....2002..	X	702
	.....1997..	X	1 772
21232005	Sand .....2002..	X	6 313
	.....1997..	X	4 626
32791001	Grinding wheels and other abrasive products, excluding industrial diamonds .....2002..	X	3 016
	.....1997..	X	2 796
00970099	All other materials and components, parts, containers, and supplies .....2002..	X	44 711
	.....1997..	X	88 480
00971000	Materials, ingredients, containers, and supplies, nsk .....2002..	X	27 667
	.....1997..	X	62 577

Note 1: For some establishments, data have been estimated from central unit values that are based on quantity-value relationships of reported data. The following symbols are used when percentage of each quantity figure estimated in this manner equals or exceeds 10 percent of published figure: p-10 to 19 percent estimated; q-20 to 29 percent estimated. If 30 percent or more is estimated, figure is replaced by S.

Note 2: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.